

# **Lipid Profiles & NSW**

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# Study

- Reviewed age, height, weight, total cholesterol, LDL, HDL and Triglycerides in 85 SEAL physicals conducted in CY 2007.
- Compared results with ATP-III standards for Cholesterol and LDL.
  - Target for cholesterol < 200 mg/dl
  - Target for LDL < 130 mg/dl

# Results

- Avg Age: 32.83 (21-52)
- Avg Cholesterol: 186.6 (108-312)
- Avg LDL: 119.9 (70-221)
- 22/85 (25.9%) Total Chol > 200
- 23/85 (27.1%) LDL > 130

# Biases

- Age
  - 5 years AD, Retirement Physicals included
- Medications
  - Excluded personnel known to be on meds
- Fasting
  - Assumed patients fasted appropriately

# Significance

- Increased serum cholesterol significantly associated with increased risk of death before age 50 (Klag, et al, NEJM, 1993)
- Men < 39 y/o with serum cholesterol > 200 have increased overall mortality
  - > 240 = 2.10 to 3.63 RR of CHD or CVD death
- Men < 39 y/o with chol < 200 = 3.8 to 8.7 years of life (Stamler, et al, JAMA, 2000)
- “Grow the Force”

# Treatment

- Therapeutic Lifestyle Changes
  - Reduce Sat Fats/Cholesterol
  - Reduce Body Weight
  - Increase stanols/sterols and fiber
  - Increase physical activity
- Prefer to avoid statins
  - Lifelong medication
  - Assoc with muscle pain